REMARKS

In response to the Office Action dated June 21, 2005, Applicants respectfully request reconsideration and withdrawal of the rejections of the claims.

Claims 1-7 and 9-22 were rejected under 35 U.S.C. §101, as being directed to non-statutory subject matter. To remove the basis for this rejection, claims 1, 6 and 9 have been amended to recite that the claimed configuration data model is stored in a database on a computer readable medium. It is respectfully submitted that these recitations place the claimed subject matter within the classes of statutory subject matter. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-11 were rejected under 35 U.S.C. §103, on the grounds that they were considered to be unpatentable over the Galis et al. patent (US 5,175,800) in view of the Bruck et al. patent (US 6,801,949), both of which are newly cited. Claims 12-22 were rejected on the basis of the Galis and Bruck patents, in further view of the previously-cited Zager et al. patent (US 6,393,396). For the reasons presented below, it is respectfully submitted that these references do not disclose, nor otherwise suggest, the *claimed* subject matter to a person of ordinary skill in the art, whether they are considered individually or in combination.

The claims are directed to a data model that represents the configuration of hardware and software entities in a computer network. One of the applications of such a data model is in the context of a managed services provider, which is responsible for provisioning and maintaining servers and other network devices that implement the websites of multiple customers. See, for example, the specification at page 3, line 1, to page 4, line 17.

A high-level overview of such a data model is illustrated in Figure 11 of the present application. Generally speaking, the data model constitutes a schema for storing different types of data in a manner that facilitates their retrieval to support a particular function. In the context of the present invention, the data model stores information pertaining to a number of different entities in the network, and their relationships to one another.

The claims of the present application are particularly directed to the configuration entity 1104, which is illustrated in greater detail in Figure 13 of the application. This component of the data model contains entities, e.g. tables, that provide configuration information relating to software components, hardware components and other attributes of a network, as well as their relationships to one another. The description of the various data model entities represented in this figure begins in the specification at page 36, line 13. By storing such information in a data model in this manner, the automated provisioning of servers that support sites on a network is facilitated. When a network site is to be scaled up, by installing additional servers, the information stored in the data model can be used to rapidly and automatically configure the additional servers, without the need for human input.

The rejections of the claims rely principally upon the Galis patent. At page 3, the Office Action states "Galis discloses the exact same concept of the claimed invention...." It is respectfully submitted that the Galis patent only has similarities to the present invention at a very general level. It does not, however, disclose the subject matter that is recited in the *claims*. More particularly, the Galis patent is directed to the management of networks, such as X.25 multiplexer networks. A significant difference is that a server, to which the present invention is directed, is a general purpose system that requires fundamentally

different modeling semantics. While the Galis patent discloses a system that is suitable for reconfiguring an X.25 multiplexer, the provisioning of a server cannot be based on the same set of parameters. For instance, a server can be a database server, a web server, an application server, an intrusion detection system, etc. The Galis patent does not disclose a data model that is designed to accommodate a general purpose system of this nature.

As such, it does not disclose a data model having the *specific* combination of entities and relationships that are recited in the claims. The Office Action recognizes this difference, but then goes on to conclude "it would have been obvious to include in the Galis system all known network components at the time the present application was filed, because the purpose of the Galis patent is to 'produce a complete description of the physical and logical communication networks'," with reference to column 10, lines 61-63. This general objective, however, does not lead to the claimed subject matter. The definition of a "complete description" of the communications network must be viewed from the perspective of the function to be performed by that description. In the context of the Galis patent, the objective is to reconfigure an X.25 multiplexer. Thus, the configuration database of the Galis patent contains information that is consistent with that objective. There is nothing in the patent, however, that teaches what type of information should be stored in a data model that is designed for the automated provisioning of general purpose servers. In particular, there is nothing to indicate how one would group the vast amount of information that characterizes a network into appropriate entities that can be used to automatically provision such a network. Consequently, the Galis patent cannot be interpreted to suggest a data model containing the *particular* sets of entities recited in the claims.

For instance, the first element of the data model recited in claim 1 is device role IP host entities that represent software roles to be implemented on specific network device IP hosts. The rejection of claim 1 refers to the fact that the Galis patent generally discloses hosts and software logical entities. It does not, however, disclose how the information about these components should be stored in a data model. In particular, it does not disclose that the data model should include device role IP host entities of the type recited in claim 1.

The next element of claim 1 is virtual IP entities that represent virtual IP addresses associated with devices on a network. With respect to this claimed subject matter, the Office Action refers to the Galis patent at column 48, lines 16-17, and column 49, line 26. However, these portions of the patent do not disclose the claimed entities as part of a data model. In fact, they do not contain any reference to *virtual* IP addresses associated with devices on a network.

The next claim element comprises status entities that represent the status of the various software and hardware elements of a computer network. The Office Action refers to the Galis patent at column 11, lines 41-49 in connection with this subject matter. This portion of the patent describes a requirements database that contains information on the ends of a communication network "and their connectivity requirements," as well as a configuration database that maintains a "physical inventory" of the network. These databases are not disclosed as containing entities that represent the *status* of software and hardware elements of the network.

The Office Action acknowledges that the Galis patent does not disclose IP hosts or virtual IP addresses. To this end, therefore, it refers to the Bruck patent at column 14, lines 31-45. While this portion of the patent discloses that virtual IP addresses are known,

per se, it does not disclose that information containing to such should be stored as entities

in a data model for configuring objects of a computer network.

For the foregoing reason, therefore, it is respectfully submitted that the Galis patent

does not disclose a configuration data model comprised of the *specific* entities recited in

claim 1, either by itself or in combination with the Bruck patent. For similar reasons, it is

respectfully submitted that the subject matter of the other pending claims is likewise not

rendered unpatentable by the disclosure of the Galis patent. A detailed discussion is

believed to be unnecessary at this time, in view of the types of differences identified above.

In summary, it is respectfully submitted that the rejections of the claims are based

upon overly broad generalities, namely that it would be obvious to include *any* information

about a network in a data model. However, the pending claims are not directed to this

general concept. Rather, they recite data models having specific combinations of entities

that are particularly adapted for the automated provisioning of general purpose servers.

Even if one accepts the proposition that it is obvious to store any kind of information in a

data model, there is no teaching to suggest that information about a network be organized in

the particular manner recited in the claims. Accordingly, it is respectfully submitted that

the claims recite combinations of elements that are neither disclosed nor otherwise

suggested by the applied references. Reconsideration and withdrawal of the rejections are respectfully requested.

Respectfully submitted,

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